

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Günter Waitl et al. Art Unit :
Patent No. : 6,946,714 Examiner :
Issue Date : September 20, 2005
Serial No. : 10/439,695
Filed : May 16, 2003
Title : SURFACE MOUNTING OPTOELECTRONIC COMPONENT AND METHOD
FOR PRODUCING SAME

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR EX PARTE REEXAMINATION TRANSMITTAL FORM

1. Pursuant to 37 CFR §1.510, this is a request for ex parte reexamination of U.S. Patent No. 6,946,714, issued September 20, 2005, on behalf of the patent owner, OSRAM GMBH.
2. The name and address of the person requesting this reexamination are: Marc M. Wefers, Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110.
3. A check in the amount of \$2520 is enclosed to cover the reexamination fee required by 37 CFR §1.20(c). The Commissioner is hereby authorized to apply any other charges or credits to Deposit Account No. 06-1050.
4. Any refund should be made to Deposit Account No. 06-1050.
5. A singled-sided copy of the patent to be reexamined is enclosed as required by 37 CFR §1.510(b)(4).
6. A copy of any disclaimer, certificate of correction, or reexamination certificate issued in the patent is included (there are none).
7. Reexamination of claims 1-4, 6, 10, and 19-22 is requested.
8. A copy of every patent or printed publication relied upon is submitted herewith, including a listing thereof on Form PTO-1449.
9. An English language translation of all necessary and pertinent non-English language patents or printed publications is included.

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EV 664073758 USMay 9, 2006

Date of Deposit

Applicant : Günter Waitl et al.
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Attorney's Docket No.: 12406-105RX2 / 1997P6453
US N1 - Re-Exam

10. The attached detailed request includes at least the following items:

A. A statement identifying each substantial new question of patentability based on prior patents and printed publications as required by 37 CFR §1.510(b)(1).

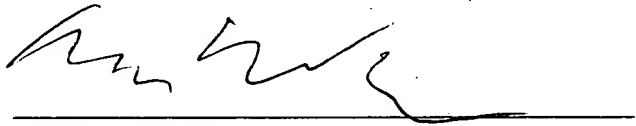
B. An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested as required by 37 CFR §1.510(b)(2).

11. The requestor's correspondence address is shown below.

Respectfully submitted,

Date: _____

5/19/06



Marc M. Wefers
Reg. No. 56,842

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DETAILED REQUEST FOR REEXAMINATION

Ex parte reexamination under 37 CFR §1.510 is requested for claims 1-4, 6, 10, and 19-22 of U.S. Patent No. 6,946,714 issued September 20, 2005 (hereinafter "the '714 patent") on behalf of the patent owner OSRAM GMBH in view of the full English translation for Japanese Patent Publication No. 9-83018.

Chain of Title

OSRAM GMBH is the owner of the '714 patent based on the following chain of title: 1) an assignment from the Inventors to OSRAM OPTO SEMICONDUCTORS GMBH & CO. OHG, recorded at the United States Patent and Trademark Office at Reel 012412, Frame 0675; 2) a name change from OSRAM OPTO SEMICONDUCTORS GMBH & CO. OHG to OSRAM OPTO SEMICONDUCTORS GMBH (attached as Appendix 1, which includes a certified English translation); and 3) a confirmatory assignment from OSRAM OPTO SEMICONDUCTORS GMBH to OSRAM GMBH (attached as Appendix 2).

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The Claims of the '714 Patent for which Reexamination is Requested

Claim 1 of the '714 patent is directed to a surface mounting optoelectronic component. The surface mounting optoelectronic component includes: (i) a base body having a recess formed therein; (ii) an optoelectronic transmitter/receiver arranged in the recess of the base body; (iii) a first transparent hardenable casting compound, different from the base body, and provided in the recess of the base body; and (iv) an optical device covering the first hardenable casting compound and placed into the first hardenable casting compound before final curing of the first hardenable casting compound.

Claim 2 depends from independent claim 1, and requires that the recess includes a ring channel surrounding the portion of the recess in which the optoelectronic transmitter/receiver is arranged. Claim 21 depends from claim 2, and further requires that the ring channel include at least some of the hardenable casting compound.

Claim 3 depends from independent claim 1, and requires that the base body includes a number of seating elements for seating the optical device, with the seating elements being arranged at a margin side relative to the recess.

Claim 4 depends from independent claim 1, and requires that the recess of the base body includes inner wall surfaces that are constructed as oblique surfaces and form a reflector.

Claim 6 depends from independent claim 1, and requires that the optical device is configured in a form of a plano-convex convergent lens.

Claim 10 depends from independent claim 1, and requires that the optical device is configured as a ball lens with a diameter that is greater than a diameter or width of the recess in the base body.

Claim 19 depends from independent claim 1, and requires that the optical device comprises a second hardenable casting compound. Claim 20 depends from claim 19, and further requires the second hardenable casting compound to be at least partially cured before being placed onto the first hardenable casting compound.

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Claim 22 depends from independent claim 1, and further requires that part of the optical device is located in the recess.

Statement Identifying Substantial New Question of Patentability

This reexamination request is based on the full English translation for Japanese Patent Publication No. 9-83018 ("the Japanese publication"). A copy of the Japanese publication (including an English language abstract, but not a full translation) was considered by the Examiner during prosecution of the '714 patent. As described in greater detail below, however, the full English translation, which was not before the Examiner during prosecution of the '714 patent, raises a substantial new question of the patentability regarding one or more claims of the '714 patent.¹ Hereinafter reference to "the Japanese publication" will be with respect to the full English translation of the document.

The Japanese publication describes a light emitting diode ("LED") unit suitable for mounting on a flat base. As shown in Figure 1 reproduced below, the unit 1 includes a spherical lens 2, an LED 3, and a support 4. The support 4 includes contains a lead frame 5 to supply voltage to LED 3. A cone-shaped reflective wall 6 formed in support 4 surrounds LED 3. (See paragraph [009] of the Japanese publication.)

¹ Moreover, 35 USC § 303(a) as amended in 2002 now states that "[t]he existence of a substantial new question of patentability is not precluded by the fact that a patent or a printed publication was previously cited by or to the Office or considered by the Office."

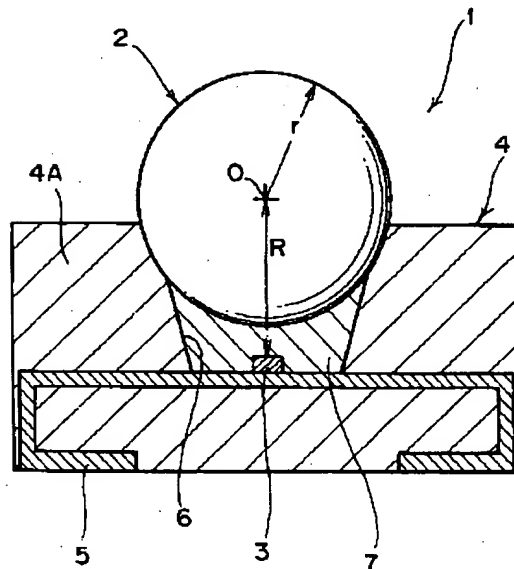


FIGURE 1

In paragraph [0011] of the Japanese publication, it further states:

“In Figure 1, 7 refers to the translucent area above the LED that is enclosed by the reflective wall 6. In this embodiment, a specific amount of translucent heat resistant epoxy resin is packed into the translucent area 7 to mount the spherical lens 2 in a specific position and the spherical lens 2 is joined to the reflector 4A without leaving any air bubbles in the translucent area 7.”

Further, in connection with a different embodiment shown in Figures 5A-5C (reproduced below), the Japanese publication describes lens 22 having a flange 22B with positioning holes 22C configured to mate with pins 4C on support 4 to precisely position lens 22 relative to LED 3. (See paragraph [0017] of the Japanese publication.)

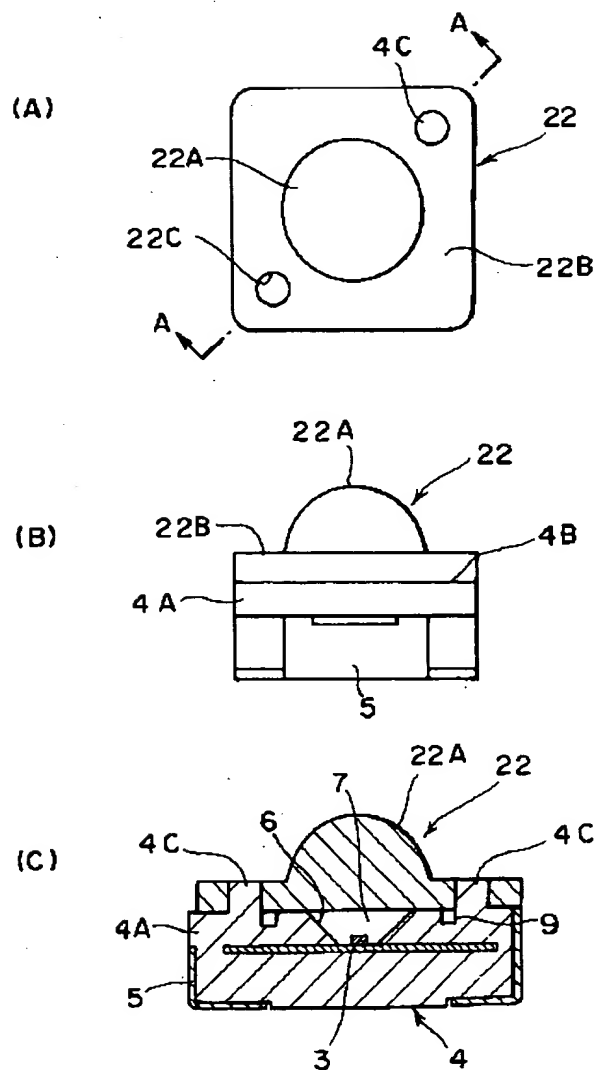


FIGURE 5

Paragraph [0017] of the Japanese publication goes on to state:

“As shown in Figure 5(C), 9 refers to the overflow slot that prevents resin from spilling over from the translucent area 7 while securing the lens 22. It is possible to further secure the lens base 22B to the support 4 with cured resin in the overflow slot 9.”

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It is possible that one could interpret the cited passages in the full English translation of the Japanese publication as disclosing that the lens is placed into the resin in area 7 prior to the resin being cured, similar to what is claimed in claim 1.

On the other hand, paragraph [0017] concludes with the sentence: "It is possible to further secure the lens base 22B to the support 4 with *cured* resin in the overflow slot 9" (emphasis added), which instead suggests that the Japanese publication teaches that lens is placed on the resin only *after* it is cured.

In view of the above, and pursuant to 37 CFR § 1.510(b)(2), it is submitted that the Japanese publication raises a substantial new question of patentability regarding one or more claims in the '714 patent.

Detailed Application of the Japanese Publication to the Claims 1-4, 6, 10, and 19-22

Pursuant to 37 CFR § 1.510(b)(2), the table below explains how the Japanese publication is applied to each of the claims for which reexamination is requested.

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Claims of the '714 Patent	The Japanese Publication
Claim 1	
1. A surface mounting optoelectronic component comprising:	- "... an LED suitable for mounting on a flat base" (paragraph [0004])
a base body having a recess formed therein; an optoelectronic transmitter/receiver arranged in the recess of the base body;	- Figure 1 and paragraph [0009], specifically, LED 3, support 4, reflective wall 6, and area 7 - see also Figure 5A-5C, paragraph [0017]
a first transparent hardenable casting compound, different from the base body, and provided in the recess of the base body; and	- "epoxy resin" described in paragraphs [0011] and shown in area 7 of Figure 1 - see also paragraph [0017] with reference to Figure 5C
an optical device covering the first hardenable casting compound and	- spherical lens 2 in Figure 1 and described in paragraphs [0009] and [0011] - lens 22 in Figures 5A-5C and described in paragraph [0017]
placed into the first hardenable casting compound before final curing of the first hardenable casting compound.	- Figure 1 and paragraph [0011], and Figures 5A-5C and paragraph [0017], as described in the "Statement Identifying Substantial New Question of Patentability" section above.
Claim 2	
2. The surface mounting optoelectronic component as claimed in claim 1, wherein the recess comprises a ring channel surrounding the recess.	- slot 9 in Figure 5C and described in paragraph [0017] - there appears to be no disclosure that that slot is a "ring channel" as claimed
Claim 3	
3. The surface mounting optoelectronic component as claimed in claim 1, wherein the base body comprises a number of seating elements for seating the optical device, the seating elements being arranged at a margin side relative to the recess.	- pins 4C in Figure 5C and described in paragraph [0017]

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Claim 4	
4. The surface mounting optoelectronic component as claimed in claim 1, wherein the recess of the base body comprises inner wall surfaces that are constructed as oblique surfaces and form a reflector.	-cone shaped reflective wall 6 in Figure 1 and described in paragraphs [0009] and [0010]
Claim 6	
6. The surface mounting optoelectronic component as claimed in claim 1, wherein the optical device is configured in a form of a plano-convex convergent lens.	-lens 22 in Figures 5A-5C and described in paragraph [0017]
Claim 10	
10. The surface mounting optoelectronic component as claimed in claim 1, wherein the optical device is configured as a ball lens with a diameter that is greater than a diameter or width of the recess in the base body.	-spherical lens 2 in Figure 1 and described in paragraph [0009]
Claim 19	
19. The surface mounting optoelectronic component as claimed in claim 1, wherein the optical device comprises a second hardenable casting compound.	-"spherical lens 2 is formed of a heat resistant translucent resin" (paragraph [0011])
Claim 20	
20. The surface mounting optoelectronic component as claimed in claim 19, wherein the second hardenable casting compound is at least partially cured before being placed onto the first hardenable casting compound.	-"spherical lens 2 is formed of a heat resistant translucent resin ... to produce a specific radius r " (paragraph [0011])
Claim 21	
21. The surface mounting optoelectronic component as claimed in claim 2, wherein the ring channel comprises the hardenable casting compound.	-"It is possible to further secure the lens base 22B to the support 4 with cured resin in the overflow slot 9" (paragraph [0017] with reference to Figures 5A-5C)
Claim 22	
22. The surface mounting optoelectronic component as claimed in claim 1, wherein part of the optical device is located in the recess.	-spherical lens 2 in support 4 in Figure 1

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Conclusion

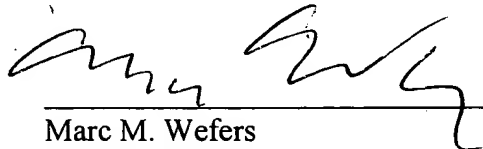
Ex parte reexamination of claims 1-4, 6, 10, and 19-22 of the '714 patent are requested in view of the Japanese publication. A check for \$2520 is enclosed to cover the reexamination fee.

Please apply any other charges or credits to deposit account 06-1050, referencing 12406-105RX2.

Respectfully submitted,

Date: _____

5/9/05



Marc M. Wefers
Reg. No. 56,842

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Die Überzeichnung des Auszuges mit dem Eintrag im Register wird bestätigt:
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District Court, Regensburg - Registration Office -		Page																8522									
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9		8	7	6	5	4	3			2	1	0	9			8	7	6	5	4	3	2	1	0	Legal Conditions	a) Date of Entry and Signature b) Comments	
a) Company's Name b) Headquarters c) Purpose of the Organization		Principal or Capital Stock			Board of Directors Personally liable partner Executive Director Administrator			Proxy																			
2		3			4			5			6																7
a) OSRAM Opto Semiconductors Gesellschaft mit beschränkter Haftung (Limited Liability Company) b) Regensburg c) Development, manufacture and sales of products based on optoelectronic semiconductors		4,570,000.00 EURO			Müller, Rüdiger Ph.D. Engineering DoB 7/27/1945 93128 Regensburg Witzgen, Robert DoB 01/25/1958 82153 Krefling						Limited Liability Company The company was created by the corporate restructuring of the OSRAM Opto Semiconductors GmbH & Co. oHG in Regensburg according to the restructuring order of September 26, 2001 in which also the articles of association were approved. If only one member of the board of directors is appointed, he alone represents the company. If several members of the board of directors are appointed, the company is represented by two members of the board of directors and together or by one member of the board of directors and an authorized officer together.																a) March 5, 2002 b) Partnership agreement on Pages 14-21 AG Regensburg HRA 6036
		5,000,000.00 EURO									The shareholders meeting on September 26, 2001 has decided to increase the capital stock by 430,000.00 EURO to 5,000,000.00 EURO and has changed the articles of association in section 5 (Capital Stock) accordingly.																a) March 5, 2002 b) articles of association Pages 49 - 54;

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Certificate of Rectification
The underlined sections of the
register in the following
photo print have been deleted
in conjunction with the
change and deletion
comments.

The compliance of the excerpt with the
contents of the register is confirmed.
Regensburg, March 12, 02
Office of the District Court in Regensburg
Registrar:
Hard
Senior Clerk
District Court
Regensburg
Bavaria

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TRANSLATOR'S CERTIFICATE

I, Eva Maria King, do hereby certify that I am fluent in the German and English languages. I prepared the translation into English of an excerpt of a register from the Regensburg District Court. It is true and accurate to the best of my ability.

2 February 2004

Eva Maria King / JSD
Eva Maria King

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F&R Reference No. 12406-105XXX

SUPPLEMENTAL CONFIRMATORY ASSIGNMENT

The Effective Date of this Assignment is September 30, 2003.

WHEREAS, Osram Opto Semiconductors GmbH, a German corporation with headquarters located at Wernerwerkstrasse 2, 93049 Regensburg, Germany (hereinafter "ASSIGNOR"), was the owner of an interest in each patent application listed in Appendix A (the "PATENT APPLICATIONS");

WHEREAS, OSRAM GmbH, a German corporation with headquarters located at Hellabrunner Strasse 1, 81536, Munich, Germany, (hereinafter "ASSIGNEE"), was desirous of acquiring an interest in and to the PATENT APPLICATIONS, including any and all Letters Patent of the United States that may be obtained therefor;

NOW, THEREFORE, be it known that, pursuant to the terms of a contract entered into between ASSIGNOR and ASSIGNEE on September 30, 2003, for good and valuable consideration recited therein and paid by ASSIGNEE to ASSIGNOR, the receipt of which is hereby acknowledged, ASSIGNOR has sold, assigned and transferred, and by these presents does hereby confirm that, as of the Effective date, ASSIGNOR did sell, assign and transfer unto ASSIGNEE, its legal representatives, successors and assigns, its entire right, title and interest in and to the PATENT APPLICATIONS, the same interest to be held by ASSIGNEE, its legal representatives, successors and assigns, to the full end of the term for which Letters Patent may be granted or may be reissued or extended, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

Furthermore, pursuant to the agreed-upon intent of the September 30, 2003 contract, ASSIGNOR explicitly confirms that this Confirmatory Assignment extends to any continuation, division, renewal, substitute, re-examination, or reissue of the applications listed in Appendix A, and that ASSIGNOR'S entire right, title and interest in any such continuation, division, renewal, substitute, re-examination, or reissue of the applications listed in Appendix A is to be held by ASSIGNEE, its legal representatives, successors and assigns, to the full end of the term for which Letters Patent may be granted or may be reissued or extended, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

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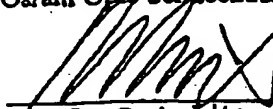
F&R Reference No. 12406-105XXX

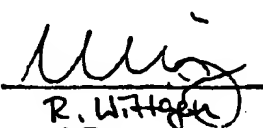
— AND, ASSIGNOR hereby confirms its agreement that the change in ownership
may be recorded in the official records of the United States Patent and Trademark Office.

The undersigned is authorized to act on behalf of ASSIGNOR.

This document contains 3 pages (including a 1-page Appendix A).

Osram Opto Semiconductors GmbH


By: Dr. R. Müller
Title: CEO


R. Witzgen
CFO

15.01.2005

Date

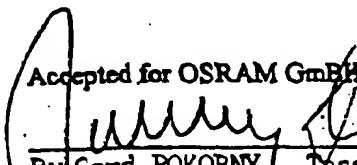
Witness Name: J. Birstein

Witness Signature: 

Witness Name: Ch. Keller

Witness Signature: 

Accepted for OSRAM GmbH


By Gerd POKORNY
Title: Vice President
& General
Counsel


Tassilo DAUNER
Senior Director

25.01.2005

F&R Reference No. 12406-105XXX

**APPENDIX A -
LISTING APPLICATIONS FOR CONFIRMATORY ASSIGNMENT BETWEEN
OSRAM OPTO SEMICONDUCTORS GMBH AND OSRAM GMBH.**

F&R Reference	OSRAM Reference	First Named Inventor/Applicant	Filed Serial No.	Issue Patent No.
12406-105002	1997P6453 US M1	Guenther Waihl	5/16/2003 10/439,696	
12406-105001	1997P6453 US N	Guenther Waihl	10/05/2000 09/581,585	6/26/2003 6,610,563

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